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Progress report: Hundreds of properties analyzed, and counting

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The past 3-4 months has been a giant scramble for the GridMarket team to achieve the goal we set in January - analyze data for hundreds of properties in New York to determine the best locations for distributed energy technology and energy efficiency upgrades.

We have crunched data and surveyed available locations for energy storage (batteries and ice), generation (solar and cogen), efficiency (lighting, HVAC, etc.) in hospitals, banks, mid-size manufacturing plants, schools, retail shops, apartment buildings, public housing, prisons, and more. The verdict? Energy storage + energy efficiency pays big in Manhattan. Efficiency + storage + solar pays big in the boroughs.

When you have more available space to play with outside of the city, these technologies can work together to create a microgrid, or protected critical infrastructure that has the capability to "island" from the utility grid in the event of a power outage, or de-grid completely. Energy is becoming distributed, reliable, and clean - and millions of data points from properties opting into our complimentary analysis programs are enabling us to match the best solutions with the right infrastructure to promote resilience and increase asset value.

Aside from the technical lessons, the most important thing we learned is that a good energy project lives and dies with customer education. Many people in the infrastructure industry would have you believe that project finance is the biggest hurdle. Bottom line - in N.Y., you can get any project with a decent return financed if your CFO doesn't have the CAPEX to underwrite it this year. Investors are desperately looking for places to park their money, and while they may be creative when it comes to maximizing the value of their investments, they are wholly uncreative when it comes to identifying new technologies and projects in which to invest. The piranhas will circle for a good return, and infrastructure projects like energy storage, solar, and efficiency are proving highly lucrative. There are a few questions owners and operators typically ask about a distributed energy project:

1. Is it safe?
2. Will better technology come out in a few years and make my installation irrelevant?
3. Do I have to upgrade everything else in the building to do one of these projects?
4. My tenants pay for their own electricity - how will this benefit me?

The short answers to the above are: 1. Yes, or we wouldn't be having this conversation; 2. Yes, new technologies will emerge, but no, your installation will not be irrelevant - you are likely seeing your most conservative return estimate over the next 10 - 20 years; 3. No, provided your gear is up to code or close to it; 4. Tackle your common load if your tenants pay - batteries are great for saving buildings money, even if only addressing the elevators, common area lighting, and HVAC.

New technologies yield new levels of discomfort. When we talk about battery storage systems with property managers, safety is always of paramount importance, and rightfully so when they are sitting in an asset worth hundreds of millions of dollars. Just as we have grown comfortable with high pressure natural gas being pumped into our onsite cogeneration plants, we will grow increasingly comfortable with bigger versions of the batteries that we've driven with in our cars for decades and the newer chemistries that we keep in our pockets or type on every day at work.

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